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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,429	12/08/2003	David S. Benco	LUC-449/Benco 51-38-38-47	2312
32205	7590	10/17/2005	EXAMINER	
PATTI & BRILL ONE NORTH LASALLE STREET 44TH FLOOR CHICAGO, IL 60602			RAMPURIA, SHARAD K	
			ART UNIT	PAPER NUMBER
			2688	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/730,429

Applicant(s)

BENCO ET AL.

Examiner

Sharad Rampuria

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin [US 20040198360], in view of La Medica, Jr. et al. [US 6625451].

As per claim 1, Kotzin teaches:

A method for selecting, by a mobile terminal, (10; Fig.1) a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the method comprising the steps of:

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Communicating between a mobile terminal and current roaming service providers for a current location of the mobile terminal; (i.e. monitor service...network parameters; 0021; Pg.2)

Selecting, based on the roaming service provider information, a respective one of the current roaming service providers; (i.e. subscriber...information...communication; 0022; Pg.2) and

Connecting subsequent call(s) associated with the mobile terminal using the selected respective roaming service provider. (i.e. engage communication; 0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, detecting registration message from the mobile terminal. However, La Medica teaches in an analogous art, providing to the mobile terminal, at least upon detecting registration message from the mobile terminal, respective roaming service provider information associated with the current roaming service providers; (i.e. attempt...register; Col.18; 65-Col. 19; 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include detecting registration message from the mobile terminal in order to provide user selectable modes of operation in a mobile communication station, which allow certain fall-back options when a preferred system may not be available, but still steers the bulk of the system selection operations to preferred systems.

As per claim 2, Kotzin teaches:

The method of claim 1 wherein the roaming service provider information is at least one of pricing, data rates, push to talk, signal strength. (i.e. monitoring of service provider network parameters; Pg.3; 0030)

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As per claim 7, Kotzin teaches:

A method for selecting, by a mobile terminal, (10; Fig.1) a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the method comprising the steps of:

Communicating between a mobile terminal and current roaming service providers for a current location of the mobile terminal; (i.e. monitor service...network parameters; 0021; Pg.2)

Selecting, at the mobile terminal and based on the displayed roaming service provider information, a respective one of the current roaming service providers; (i.e. subscriber...information...communication; 0022; Pg.2)

Communicating the selection of the respective current roaming service provider to the telecommunication network and tuning the mobile terminal to the selected roaming service provider; (i.e. engage communication; 0028; Pg.3 and Claim 1) and

Connecting, by the selected respective roaming service provider, subsequent call(s) associated with the mobile terminal. (i.e. engage communication; 0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, detecting registration message from the mobile terminal. However, La Medica teaches in an analogous art, providing to the mobile terminal, at least upon detecting registration message from the mobile terminal, respective roaming service provider information associated with the current roaming service providers; (i.e. attempt...register; Col.18; 65-Col. 19; 9) displaying the roaming service provider information at the mobile terminal; (i.e. display; Col.14; 37-47) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include detecting registration message from the mobile terminal in order to provide user selectable modes of operation in a mobile communication

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station, which allow certain fall-back options when a preferred system may not be available, but still steers the bulk of the system selection operations to preferred systems.

Claims 3-4, 8 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & La Medica further in view of Rosenberg [US 20020102973].

As per claim 3, the above combination teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the method of claim 1 wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an incoming call and an outgoing call in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

As per claim 4, the above combination teaches all the particulars of the claim except the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature. However, Rosenberg teaches in an analogous art, that the method of claim 1, wherein the selecting, by a mobile terminal, of a roaming service provider in the telecommunications network, when the mobile terminal is roaming, is a feature of the telecommunications network, and wherein the method further comprises, the step of determining, upon detecting the registration message from the mobile terminal, if the mobile

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terminal has subscribed to the feature, and if the mobile terminal has not subscribed, then one of connecting the subsequent call(s) via a contracted roaming service provider or not connecting the subsequent call(s), and, if the mobile terminal has subscribed, proceeding to the step providing to the mobile terminal respective roaming service provider information. (i.e. an incoming call and an outgoing call; Pg.6; 0068) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

As per claim 8, the above combination teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the method of claim 7 wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an incoming call and an outgoing call in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

As per claim 11, the above combination teaches all the particulars of the claim except the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature. However, Rosenberg teaches in an analogous art,

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that the method of claim 7, wherein the selecting, by a mobile terminal, of a roaming service provider in the telecommunications network, when the mobile terminal is roaming, is a feature of the telecommunications network, and wherein the method further comprises, the step of determining, upon occurrence of a call associated with the mobile terminal, if the mobile terminal has subscribed to the feature, and if the mobile terminal has not subscribed, then one of connecting the subsequent call(s) via a contracted roaming service provider or not connecting the call(s), and, if the mobile terminal has subscribed, proceeding to the step providing to the mobile terminal respective roaming service provider information. (i.e. an incoming call and an outgoing call; Pg.6; 0068) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the step of determining, upon detecting the registration message from the mobile terminal, if the mobile terminal has subscribed to the feature in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

Claims 5, 9, 12 & 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & La Medica further in view of Nelson [US 6470182].

As per claim 5, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the method of claim 1 wherein the method further comprises, using the selected respective roaming service provider for subsequent calls associated with the mobile terminal while the mobile terminal is within at least one cell of the



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selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 9, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the method of claim 7 wherein the method further comprises, using the selected respective roaming service provider for subsequent calls associated with the mobile terminal while the mobile terminal is within at least one cell of the selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 12, Kotzin teaches:

A system for allowing a mobile terminal to select a roaming service provider in a telecommunications network, when the mobile terminal is roaming, (Abstract) the system comprising:

A mobile terminal (10; Fig.1) that is operatively connected to a telecommunication network, the mobile terminal having a display (18; Fig.1, 0019; Pg.2)

A call controller in the telecommunication network for controlling a call for the mobile terminal; (i.e. CPU; 44; Fig.1, 0022; Pg.2)

Each of the roaming service providers having respective roaming service provider information; (0022; Pg.2) and

Respective roaming service module in a respective system of each of the service providers, the roaming service module operatively connected to at least the call controller; (0028; Pg.3 and Claim 1)

Kotzin doesn't teach explicitly, detecting registration message from the mobile terminal. However, La Medica teaches in an analogous art, wherein, upon detecting the registration message from the mobile terminal, respective roaming service provider information associated with the current roaming service providers is provided to the mobile terminal and displayed, (i.e. display; Col.14; 37-47) wherein a respective one of the current roaming service providers is selected based on the displayed roaming service provider information, wherein the selection of the respective current roaming service provider is communicated to the telecommunication network and the mobile terminal is tuned to the selected roaming service provider; and wherein subsequent call(s) is connected to the selected respective roaming service provider. (i.e. attempt...register; Col.18; 65-Col. 19; 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include detecting registration message from the mobile terminal in order to provide user selectable modes of operation in a mobile communication station, which allow certain fall-back options when a preferred system may not be available, but still steers the bulk of the system selection operations to preferred systems.

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The above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, a plurality of service providers in the telecommunication network, each of the service providers having respectively at least one cell in which the service provider is operational (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

As per claim 14, the above combination teaches all the particulars of the claim except the mobile terminal is within at least one cell of the selected respective roaming service provider. However, Nelson teaches in an analogous art, that the system of claim 12 wherein the selected respective roaming service provider is used for subsequent calls associated with the mobile terminal while the mobile terminal is within at least one cell of the selected respective roaming service provider. (Col.4; 18-42) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include the mobile terminal is within at least one cell of the selected respective roaming service provider in order to control the roaming in a geographic area in which there are multiple service providers.

Claims 6 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & La Medica further in view of Moore [US 20050020293].

As per claim 6, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. However, Moore teaches in an analogous art, that the method of claim 1 wherein the method further comprises re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

As per claim 10, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. However, Moore teaches in an analogous art, that the method of claim 7 wherein the method further comprises re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

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Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & La Medica, Nelson further in view of Rosenberg.

As per claim 13, the above combination teaches all the particulars of the claim except an incoming call and an outgoing call. However, Rosenberg teaches in an analogous art, that the system of claim 12 wherein the subsequent call(s) associated with the mobile terminal is one of an incoming call and an outgoing call. (i.e. an incoming call and an outgoing call; Pg.6; 0068) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include an incoming call and an outgoing call in order to provide an intelligent roaming method for enabling a mobile station to select a preferred neutral service provider within a communication system.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzin & La Medica, Nelson further in view of Moore.

As per claim 15, the above combination teaches all the particulars of the claim except re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal. However, Moore teaches in an analogous art, that the system of claim 12 wherein a respective roaming service provider is re-selected for each subsequent call associated with the mobile terminal. (Pg.3; 0021) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to include re-selecting a respective roaming service provider for each subsequent call associated with the mobile terminal in order to provide a

method for re-selecting control channels in a mobile station reduces the use of resources by limiting an evaluation of candidate control channels to those channels which satisfy certain criteria and are deemed to be eligible control channels.

### *Conclusion*

II. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bridges et al. disclose a mobile station is used by one of a plurality of subscribers of a home area wireless service provider. The mobile station includes a memory that stores a list of preferred wireless carrier identities for use by the mobile station when roaming. The list of preferred wireless carrier identities is stored based upon a national account assigned to the mobile station for a plurality of market areas. The mobile station also includes a selector that automatically selects a preferred wireless carrier from the list stored in the memory when the mobile station is roaming and enters one of the market areas of the plurality of market areas.

Seppanen et al. disclose a mobile station (10) maintains a single, prioritized list of all available networks (i.e., all public, residential, and private networks). Access to the various networks is then based on the user's needs. A first type of access is an automatic access, that requires little or no user involvement. A second type of access is to a user-specified network. A third type of access is to a user-specified service (e.g., data, fax, e-mail, etc.) that is supported by at least one of the networks. The mobile station can search for additional networks, and can also search for additional networks that support only a specified type of service, or for a

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network that supports a service not supported by networks that are already in the list. All of the networks can be searched at once so that the user can readily make a selection from the single, prioritized network list. The network priorities are user programmable by moving network names up and down in the list using a mobile station user interface, such as the mobile station's keypad. The higher the network name is placed in the list, the higher is the priority of the network.

Hronek disclose the distribution of intelligent roaming databases (IRDBs) including a list of available carriers to a roaming mobile device.

Adamany et al. disclose a home wireless communications system with respect to a wireless unit that is roaming in a visited wireless communications system.

Anvekar et al. disclose a technique to register a roaming cell-phone in a visiting location as a local phone. The technique involves identifying roaming-related information from the roaming cell-phone in the visiting location, and then dynamically configuring the roaming cell-phone to operate as a local cell-phone in the visiting location.

Coursey disclose a method of intelligent roaming wherein a Systems Access List (SAL), programmed into the memory of a mobile station over-the-air or via a physical interface, is used to select a preferred system for service.

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III. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870.

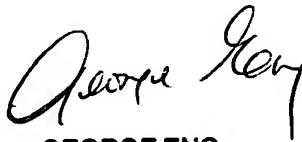
The examiner can normally be reached on M-F. (8:15-4:45).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or [EBC@uspto.gov](mailto:EBC@uspto.gov).

Sharad Rampuria  
Examiner  
Art Unit 2683

September 24, 2005

  
GEORGE ENG  
PRIMARY EXAMINER